IT- 314 Software Engineering

Group 14

Workflow management system

Q. 1 :
- Users:
    - Insurance agent
    - Customer
- Stakeholders:
    - Insurance agent
    - Insurance company
    - Employees

User stories:
- As the owner of the company I would like to develop consolidated insurance packages so that my company can compete with others.
- As a user I should be able to create an account so that I can use the application.
- As a registered user I should be able to login into the system so that I can access all the functionality.
- As a registered user I should be able to check the details regarding the insurance policies.
- As an insurance agent, I should be able to view my performance analytics.
- As an insurance agent, I should be able to view the amount I would be receiving this month as commision.
- As a customer, I should be able to create packages based on my priorities.
- As a user, I should be able to see information about my insured policies.
- As a user, I should be able to pay my amount for policy.
- As a user, I should be able to create my own packages based on the currently active packages.
- As a user, I should be able to send my created packages for review.

- As an insurance agent, I should be able to see policy holders insured by me.
- As a user, I should be able to see suggestions based on my search regarding packages.
- As a user, I should be able to compare multiple different packages so that I can choose from them.

Prioritizing using requirement elicitation techniques:- We will be making use of MosCoW techniques for prioritizing the requirements.
MUST:- In this section, the most important and mandatory requirements are involved and worked upon.

- As the owner of the company I would like to develop consolidated insurance packages so that my company can compete with others.
  This is important and must have features so that the company can attract more customers.
- As a user, I should be able to create my own packages based on the currently active packages.
  This is a must have feature as this feature will help in making packages based on customer priority.
- As a user, I should be able to send my created packages for review.
  This is a must have feature as this feature helps to validate packages sent by the user.
- As a registered user I should be able to check the details regarding the insurance policies.
- As a user I should be able to create an account so that I can use the application.

SHOULD:-
- As a user, I should be able to see information about my insured policies.
- As an insurance agent, I should be able to see policy holders insured by me.
- As a user, I should be able to pay my amount for policy.

COULD:-
- As an insurance agent, I should be able to view my performance analytics.

- As an insurance agent, I should be able to view the amount I would be receiving this month as commision.
- As a user, I should be able to see suggestions based on my search regarding packages.

WOULD:-
- As a user, I should be able to compare multiple different packages so that I can choose from them.

Q. 2 :

List of market facing technologies helpful for this project:

Email Marketing

Customer relationship management

Marketing Attribution Software

Content Management System

Social-media Marketing

Q.3: Suggest an effective requirement engineering framework that can be used in market-facing projects because there are no existing systems that can be analyzed for the development so we need to consider all requirements from the core.

Since there are no existing models to be analyzed and we don't have a clear set of requirements, Agile methodology would be the best approach. Thus, an effective requirement engineering framework for such problem will be using the **Scrum method.**

Using the user-stories and with user interaction, we can find the requirements needed and can develop different sprints and work on small sets of requirements incrementally.

Q. 4 : To provide suggestions to the users regarding the created packages is infeasible since to provide suggestions there has to be a historical data that needs to be analyzed first by the system and since there is no similar existing system from which this type of analysis could be done so the suggestions feature is infeasible. If there is already existing data regarding the policies, there are constraints due to new policies being added by the agents and to keep up with the new policies there has to be large data to correctly provide suggestions to the users with no conflicts in the rules of the policy. Reviewing the package created by the user is however possible since the package is created from the preexisting packages and hence reviewing the policies is feasible.

Q5. When the customer is not provided with information related to the pre-defined products already available before trying the second option (customization). Thus the consumer should be able to view the outcome of the first product before they are able to try customization to know what is readily available, i.e., create your own plan only if the pre-defined don't work. For example, if a customer can create his/her plan without going through what is already provided by the company, they may end up with a plan that is identical or very similar to the existing plans. To make the process easier, the customer should be able to search and filter the plans based on some basic requirements.

The optimized version of the same should be given in suggestions even while the customization process is going on. Requirements engineering activity - verification and validation.

Q6. Identify three different use cases where the conflicts between the requirements occur? Do you think that the conflicts can be resolved? How?

The different use cases where the conflicts between the requirements occur are:

1) In case a package is given with a P1 price and F1 features and a customer would want a custom package with only necessary features in their package but the custom package is more expensive and hence they would have to amend the system. So a conflict will occur between the customer requirements and the package system should calculate the price effectively.

2) When the company is competing for a package which is very commonly used among people and some how to tackle the market the system provides the price which can get the company to lose the system has to make sure of this situation and alarm the company. Yes, I think the conflict can be solved by keeping the same price.

Q:7 Considering the set of features you have identified, what are the non-functional aspects associated with this system? Explain rationale behind the selection of each of them.

Security: only the authorised agent and the LIC member have access to this product so they can change the package or they can give the request on behalf of the client for their customise package.

Reliability: this product has to continuously perform the specified function without any failure.

Survivability: product should recover itself from the failure and start continues to function.

Availability: product has to be available at any time.

Usability: easy to use so the client can use the product easily and customise or compare the packages.

Efficiency: products have to give the proper package that fulfills the requirement in given response time.

Flexibility: this product has to run on any hardware or software.

Maintainability: product should be easy to maintain for updating the package information or to manage the request that is given by the client for their customise package.

Scalability: product has to manage it's processing capacity to meet the increasing demand.

Q:8 Open issue
1) In a customer priority based product, after getting a competing price for the package suggested by the system,will it be available to other customers also?
2) Trusting a company with money online is not yet feasible today. People would hesitate to share their personal information and their income or property related details. So this open issue gets time to resolve .

3) Wrong claims can be done by the people who want to take advantage of other people's policy by forged documents. So, this needs to be resolved.